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IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Patent Application

Vasyl' V. Kozoriz

Case 1

Serial No. 09/654,964 Group Art Unit
2834

Filed September 5, 2000

Examiner Dang D. Le

Title Super Conductive Bearing

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C., 20231

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SIR:

SUPPLEMENTAL AMENDMENT CORRECTION

Please amend the Amendment filed in response to the Office action of
November 7, 2002 as follows:

Page 23: Amend the third full paragraph as follows:

"As set forth in the specification and in Fig. 1 of the drawing, applicant's novel invention has rotor closed loops mounted on each end of the rotor and stator closed loops angularly mounted adjacent each of the closed rotor loops. Claim 1 has been amended to recite these elements as "rotor closed loops ... mounted on each end of the rotor" and "stator closed loops ... adjacent each of the closed rotor loops". It is to be noted that claim 1 recites "...apparatus ... forming a bearing supporting a rotation of the rotor in an equilibrium stable free state within the stator". Independent claim 14 as above amended recites "... a plurality of closed rotor ... loops ... wound ... around ... the rotor and positioned along the rotor ..." and "... a plurality of closed stator loops .. mounted on the stator and each angularly positioned in the planes around the rotor adjacent ... one of the closed rotor ... loops....". It is submitted that Rao does not teach this structure of applicant's invention as recited in amended claims 1 and 14. Rao illustrates in Fig. 1 a rotor structure mounted on one end of the rotor and a stator structure mounted opposite the end of the rotor. He does not teach rotor closed loops mounted on each end of the rotor nor along the rotor as recited in amended claim 1 and independent claim 14 nor does he show in Fig. 1, as recited in applicant's amended claim 1 and independent claim 14, apparatus forming a bearing

supporting a rotation of the rotor in an equilibrium stable free state within the stator. In contrast, the Rao bearing set forth in Fig. 1 has a rotor that appears to rotate adjacent to and outside the stator. Since the rotor appears to be the same size as the stator how could it rotate inside the stator. Fig. 2 of the Rao drawing may show a rotor within the stator but both loops appear to be mounted on the stator while the rotor merely is formed with laminations. In contrast to Figs. 2 and 3 of Rao, applicant's independent claim 1 recites rotor closed loops mounted on each end of the rotor and stator loops mounted on the stator adjacent each closed rotor loop. It is noted in Fig. 1 of Rao that the magnetic field is parallel to the axis of the rotor bearing. It is also noted that the magnetic field in Rao's Fig. 2 appears to be rotational with the rotor. This is quite different than the field of applicant's novel apparatus."

Page 23: the above third full paragraph as amended reads as follows:

"As set forth in the specification and in Fig. 1 of the drawing, applicant's novel invention has rotor closed loops mounted on each end of the rotor and stator closed loops angularly mounted adjacent each of the closed rotor loops. Claim 1 has been amended to recite these elements as "rotor closed loops ... mounted on each end of the rotor" and "stator closed loops ... adjacent each of the closed rotor loops". It is to be noted that claim 1 recites "...apparatus ... forming a bearing supporting a rotation of the rotor in an equilibrium stable free state within the stator". Independent claim 14 as above amended recites "... a plurality of closed rotor ... loops ... wound ... around ... the rotor and positioned along the rotor ..." and "... a plurality of closed stator loops .. mounted on the stator and each angularly positioned in the planes around the rotor adjacent ... one of the closed rotor ... loops....". It is submitted that Rao does not teach this structure of applicant's invention as recited in amended claims 1 and 14. Rao illustrates in Fig. 1 a rotor structure mounted on one end of the rotor and a stator structure mounted opposite the end of the rotor. He does not teach rotor closed loops mounted on each end of the rotor nor along the rotor as recited in amended claim 1 and independent claim 14 nor does he show in Fig. 1, as recited in applicant's amended claim 1 and independent claim 14, apparatus forming a bearing supporting a rotation of the rotor in an equilibrium stable free state within the stator. In contrast, the Rao bearing set forth in Fig. 1 has a rotor that appears to rotate adjacent to and outside the stator. Since the rotor appears to be the same size as the stator how could it rotate inside the stator. Fig. 2 of the Rao drawing may show a rotor within the stator but both loops appear to be mounted on the stator while the rotor merely is formed with laminations. In contrast to Figs. 2 and 3 of Rao, applicant's independent claim 1 recites rotor closed loops mounted on each end of the rotor and stator loops mounted on the stator adjacent each closed rotor loop. It is noted in Fig. 1 of Rao that the magnetic field is parallel to the axis of the rotor bearing. It is also noted that the magnetic field in Rao's Fig. 2 appears to be rotational with the rotor. This is quite different than the field of applicant's novel apparatus."

Page 25: Amend the last paragraph as follows:

"It is noted that two sets coils are mounted [in] on poles of the Rao stator and that no coils are mounted on the rotor set forth in Fig. 2 of the Rao structure. How could one set of the coils be mounted on round poles and a set of the Hennessy coils be mounted on pie-shaped poles. Even if this were possible, both sets of coils would be on the stator and the rotor would have no coils. Obviously, the Rao structure disclosed in Fig. 2 of the Rao drawing in view of Hennessy does not disclose, teach or anticipate applicant's "...rotor closed loops ...". There are not rotor loops disclosed by either Fig. 2 of Rao or Hennessy. Since there are no closed rotor loops disclosed by Rao or Hennessy, or the combination, there obviously cannot be stator closed loops adjacent each closed rotor loop. Thus, it is respectfully submitted that independent parent claim 1 and dependent claims 5, and 9 through 11, further defining the structure recited by parent claim 1, respectively, are non-obvious in view of and particularly distinguish over Rao in view of Hennessy."

Page 23: the above third full paragraph as amended reads as follows:

"It is noted that two sets coils are mounted on poles of the Rao stator and that no coils are mounted on the rotor set forth in Fig. 2 of the Rao structure. How could one set of the coils be mounted on round poles and a set of the Hennessy coils be mounted on pie-shaped poles. Even if this were possible, both sets of coils would be on the stator and the rotor would have no coils. Obviously, the Rao structure disclosed in Fig. 2 of the Rao drawing in view of Hennessy does not disclose, teach or anticipate applicant's "...rotor closed loops ...". There are not rotor loops disclosed by either Fig. 2 of Rao or Hennessy. Since there are no closed rotor loops disclosed by Rao or Hennessy, or the combination, there obviously cannot be stator closed loops adjacent each closed rotor loop. Thus, it is respectfully submitted that independent parent claim 1 and dependent claims 5, and 9 through 11, further defining the structure recited by parent claim 1, respectively, are non-obvious in view of and particularly distinguish over Rao in view of Hennessy."

REMARKS

The above identified Amendment has been amended to correct certain informalities occurring therein. In particular, the third full paragraph of page 23 as been amended to recite "... He does not teach rotor closed loops mounted on each end of the rotor nor along the rotor as recited in amended claim 1 and independent claim 14 nor does he show in Fig. 1, as recited in applicant's amended claim 1 and independent claim 14, apparatus forming a bearing supporting a rotation of the rotor in an equilibrium stable free state within the stator....". He (Rao) as set forth in the specification and drawing does not disclose, teach nor anticipate rotor closed loops mounted on each end of the rotor as recited by applicant's amended claims. The term "not" was unfortunately omitted in the preparation of the amendment. The last paragraph on page 25 is amended to recite "It is noted that two sets coils are mounted

on poles of the Rao stator and that no coils are mounted on the rotor set forth in Fig. 2 of the Rao structure. How could one set of the coils be mounted on round poles and a set of the Hennessy coils be mounted on pie-shaped poles....". This paragraph is amended to correct minor errors in the text of the cited sentence. These changes conform with applicant's attorney comments to the Examiner presented in a telephone call on February 21, 2003. Applicant respectfully requests the Examiner to approve these changes.

If any questions should arise with respect to the above remarks, or if it would in any way expedite the prosecution of this case, applicants' attorney would appreciate a telephone call by dialing Area Code (614)-888-6533.

Respectfully submitted

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Date: 2/22/2003
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